# abcam

### **Product datasheet**

## FITC Anti-VCP antibody [Hs-14] ab77238

#### 2 References

Overview		
Product name	FITC Anti-VCP antibody [Hs-14]	
Description	FITC Mouse monoclonal [Hs-14] to VCP	
Host species	Mouse	
Conjugation	FITC. Ex: 493nm, Em: 528nm	
Tested applications	Suitable for: Flow Cyt (Intra)	
Species reactivity	Reacts with: Mouse, Human	
Immunogen	Tissue, cells or virus corresponding to Human VCP. Freshly ejaculated human sperm washed in PBS & extracted in 3% acetic acid, 10% glycerol, 30 mM benzaminidine. The acid extract was dialyzed against 0.2% acetic acid and then used for immunization.	
Positive control	Sperm cells.	
General notes	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use.	
	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.	
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As	

Properties	
Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	pH: 8.0 Preservative: 0.097% Sodium azide Constituents: 0.2% BSA, 0.2% Tris buffered saline
	0.2% (w/v) high-grade protease free BSA
Purity	Size exclusion
Clonality	Monoclonal

Clone number	Hs-14
lsotype	lgМ

#### Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab77238 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		

#### **Application notes**

Flow Cyt: Use 20µl for 100µl cell suspension.

Not yet tested in other applications. Optimal dilutions/concentrations should be determined by the end user.

Target		
Function	Necessary for the fragmentation of Golgi stacks during mitosis and for their reassembly after mitosis. Involved in the formation of the transitional endoplasmic reticulum (tER). The transfer of membranes from the endoplasmic reticulum to the Golgi apparatus occurs via 50-70 nm transition vesicles which derive from part-rough, part-smooth transitional elements of the endoplasmic reticulum (tER). Vesicle budding from the tER is an ATP-dependent process. The ternary complex containing UFD1L, VCP and NPLOC4 binds ubiquitinated proteins and is necessary for the export of misfolded proteins from the ER to the cytoplasm, where they are degraded by the proteasome. The NPLOC4-UFD1L-VCP complex regulates spindle disassembly at the end of mitosis and is necessary for the formation of a closed nuclear envelope (By similarity). Regulates E3 ubiquitin-protein ligase activity of RNF19A.	
Involvement in disease	Defects in VCP are the cause of inclusion body myopathy with early-onset Paget disease and frontotemporal dementia (IBMPFD) [MIM:167320]; also known as muscular dystrophy, limb-girdle, with Paget disease of bone or pagetoid amyotrophic lateral sclerosis or pagetoid neuroskeletal syndrome or lower motor neuron degeneration with Paget-like bone disease. IBMPFD features adult-onset proximal and distal muscle weakness (clinically resembling limb girdle muscular dystrophy), early-onset Paget disease of bone in most cases and premature frontotemporal dementia.	
Sequence similarities	Belongs to the AAA ATPase family.	
Post-translational modifications	Phosphorylated by tyrosine kinases in response to T-cell antigen receptor activation (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR. ISGylated.	
Cellular localization	Cytoplasm > cytosol. Nucleus. Present in the neuronal hyaline inclusion bodies specifically found in motor neurons from amyotrophic lateral sclerosis patients. Present in the Lewy bodies specifically found in neurons from Parkinson disease patients.	

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <u>https://www.abcam.com/abpromise</u> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors